BRAIN RESEARCH

VOL. 640 NOS. 1/2 **CONTENTS** **21 MARCH 1994**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Announcement from the Publisher v

Guidelines for the Submission of Manuscripts vii

Research Reports

Effects of MK-801 and CNQX, glutamate receptor antagonists, on bladder activity in neonatal rats
K. Sugaya and W.C. De Groat (USA) 1

Neuronal activity related to memory in the intermediate and medial part of the hyperstriatum ventrale of the chick brain
C.M. Bradford and B.J. McCabe (UK) 11

Ultrastructural localization of butyrylcholinesterase on neurofibrillary degeneration sites in the brains of aged and Alzheimer's disease patients
P. Gómez-Ramos, C. Bouras and M.A. Morán (Spain, Switzerland) 17

β-Amyloid precursor protein fragments and lysosomal dense bodies are found in rat brain neurons after ventricular infusion of leupeptin
I. Hajimohammadreza, V.E.R. Anderson, J.B. Cavanagh, M.P. Seville, C.C. Nolan, B.H. Anderton and P.N. Leigh (UK) 25

Regulation of γ-aminobutyric acid$_B$ ($GABA_B$) receptors in cerebral cortex during the estrous cycle
M.I. Al-Dahan, M.H.J. Tehrani and R.H. Thalmann (USA) 33

GABA in the inferior colliculus plays a critical role in control of audiogenic seizures
C.L. Faingold, M.J. Marcinczyk, D.J. Casebeer, M.E. Randall, S.P. Arnerić and R.A. Browning (USA) 40

A toxin from the venom of the predator snail *Conus textile* modulates ionic currents in *Aplysia* bursting pacemaker neuron
V. Lev-Ram, B.M. Olivera and I.B. Levitan (USA) 48

NT-3 and BDNF protect CNS neurons against metabolic/excitotoxic insults
B. Cheng and M.P. Mattson (USA) 56

Lysosomal abnormalities in degenerating neurons link neuronal compromise to senile plaque development in Alzheimer disease
A.M. Cataldo, D.J. Hamilton and R.A. Nixon (USA) 68

Distribution of mRNA for CCK-B receptor in the brain of *Mastomys natalensis*: abundant expression in telencephalic neurons
Y. Shigeyoshi, H. Okamura, T. Inatomi, T. Matsui, M. Ito, H. Kaji, H. Abe, H. Nakata, T. Chiba and K. Chihara (Japan) 81

Dilatation of cerebral arterioles in response to *N*-methyl-D-aspartate: role of CGRP and acetylcholine
F.M. Faraci and K.R. Breese (USA) 93

Endothelial differentiation in intracerebral and subcutaneous experimental gliomas
O. Arosarena, C. Guerin, H. Brem and J. Laterra (USA) 98

Corticosterone effects on corticotropin-releasing hormone mRNA in the central nucleus of the amygdala and the parvocellular region of the paraventricular nucleus of the hypothalamus
S. Makino, P.W. Gold and J. Schulkin (USA) 105

NMDA receptor binding in rodent suprachiasmatic nucleus
M.D. Hartgraves and J.L. Fuchs (USA) 113

Delayed expression of c-fos protein in rat hippocampus and cerebral cortex following transient in vivo exposure to hypoxia
T. Taniguchi, R. Fukunaga, Y. Matsuoka, K. Terai, I. Tooyama and H. Kimura (Japan) 119

Role of neuron soma firing in the restoration of neurotensin store in sympathetic preganglionic neuron terminals after stimulus-evoked depletion
E. Maher, B. Bachoo and C. Polosa (Canada) 126

In vitro and in vivo evidence of neurotensin release from preganglionic axon terminals in the stellate ganglion of the cat
E. Maher, B. Bachoo and C. Polosa (Canada) 131

Social isolation-induced enhancement of the psychomotor effects of morphine depends on corticosterone secretion
V. Deroche, P.V. Piazza, M. Le Moal and H. Simon (France) 136

Epileptogenic actions of xanthines in relation to their affinities for adenosine A_1 receptors in CA3 neurons of hippocampal slices (guinea pig)
I. Moraidis and D. Bingmann (FRG) 140

Differential regulation of glutamate decarboxylase and preproenkephalin mRNA levels in the rat striatum
J.-J. Soghomonian (Canada) 146

Brainstem dopaminergic, cholinergic and serotoninergic afferents to the pallidum in the squirrel monkey
A. Charara and A. Parent (Canada) 155

(contents continued on p. 360)

0006-8993(19940321)640:1/2;1-X

(contents continued)

Morphological study of long axonal projections of ventral medullary inspiratory neurons in the rat
J. Lipski, X. Zhang, B. Kruszewska and R. Kanjhan (New Zealand) 171
The effects of chronic continuous versus intermittent levodopa treatments on striatal and extrastriatal D_1 and D_2 dopamine receptors and dopamine uptake sites in the 6-hydroxydopamine lesioned rat – an autoradiographic study
K.K. Gnanalingham and R.G. Robertson (UK) 185
Reversal by NGF of cytostatic drug-induced reduction of neurite outgrowth in rat dorsal root ganglia in vitro
P.N.M. Konings, W.K. Makkink, A.M.L. Van Delft and G.S.F. Ruigt (Netherlands) 195
Opposite presynaptic regulations by glutamate through NMDA receptors of dopamine synthesis and release in rat striatal synaptosomes
J.-M. Desce, G. Godeheu, T. Galli, J. Glowinski and A. Chéramy (France) 205
The medial preoptic area is involved in both sexual arousal and performance in male rats: re-evaluation of neuron activity in freely moving animals
T. Shimura, T. Yamamoto and M. Shimokochi (Japan) 215
Hippocampal asymmetry in the behavioral responses to the 5-HT1A receptor agonist 8-OH-DPAT
I. Belcheva, S. Belcheva, V.V. Petkov and V.D. Petkov (Bulgaria) 223
Physiological roles of glycine and γ-aminobutyric acid in dissociated neurons of rat visual cortex
Y. Takahashi, T. Shirasaki, H. Yamanaka, H. Ishibashi and N. Akaike (Japan) 229
Developmental immunohistochemistry of bifunctional protein in human brain
A. Imamura, A. Kamei, Y. Suzuki, T. Orii and S. Takashima (Japan) 236
Muscarinic cholinergic receptor binding in rat brain following traumatic brain injury
B.G. Lyeth, J.Y. Jiang, T.M. Delahunty, L.L. Phillips and R.J. Hamm (USA) 240
The CCK_A receptor antagonist devazepide does not modify opioid self-administration or drug discrimination: comparison with the dopamine antagonist haloperidol
G.A. Higgins, N. Joharchi, Y. Wang, W.A. Corrigall and E.M. Sellers (Canada) 246
Reversal of dexfenfluramine-induced anorexia and c-Fos/c-Jun expression by lesion in the lateral parabrachial nucleus
B.-H. Li, A.C. Spector and N.E. Rowland (USA) 255
Changes in [^{3}H]PAF binding and PAF concentrations in gerbil brain after bilateral common carotid artery occlusion: a quantitative autoradiographic study
M.T. Domingo, B. Spinnewyn, P.E. Chabrier and P. Braquet (France) 268
Distribution of target cells for 1,25-dihydroxyvitamin D_3 in the brain of the yellow bellied turtle *Trachemys scripta*
H.-J. Bidmon and W.E. Stumpf (FRG, USA, Japan) 277
Binaural response patterns in subdivisions of the medial geniculate body
T. Littman, N. Kraus, T. McGee and T. Nicol (USA) 286
Distribution and characteristics of a 90 kDa protein, KG-CAM, in the rat CNS
J.D. Peduzzi, M.H. Irwin and E.E. Geisert Jr. (USA) 296
GM1 ganglioside partially rescues cultured dopaminergic neurons from MPP^+-induced damage: dependence on initial damage and time of treatment
N.D. Stull, J.S. Schneider and L. Iacovitti (USA) 308
Photoperiodic effects on puberty and specific 2-[^{125}I]iodomelatonin binding sites in Siberian hamsters
M.J. Duncan (USA) 316
Prolonged antinociception following carbon dioxide anesthesia in the laboratory rat
S.A. Mischler, M. Alexander, A.H. Battles, J.A. Raucci, Jr., J.W. Nalwalk and L.B. Hough (USA) 322
Effects of 21 days treatment with fluoxetine on stimulated endogenous 5-hydroxytryptamine overflow in the rat dorsal raphe and suprachiasmatic nucleus studied using fast cyclic voltammetry in vitro
J.J. O'Connor and Z.L. Kruk (UK) 328

Short Communications

A study of tachykinin-immunoreactivity in the cat visual cortex
Q. Gu, Y. Liu and M.S. Cynader (Canada) 336
Brain uptake of trace metals, zinc and manganese, in rats
A. Takeda, T. Akiyama, J. Sawashita and S. Okada (Japan) 341
Induction of spinal NADPH-diaphorase by nerve injury is attenuated by adrenal medullary transplants
A.T. Hama and J. Sagen (USA) 345
Adrenalectomy increases the number of substance P and somatostatin immunoreactive nerve cells in the rat lumbar dorsal root ganglia
R. Coveñas, M. DeLeón, G. Chadi, A. Cintra, J.-Å. Gustafsson, J.A. Narvaez and K. Fuxe (Sweden, Spain) 352

Author Index 357